# Statistics and Data Analysis: Core Assignment 1 Practice problem #1

Use the following data:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 82 | 98 | 106 | 108 | 112 | 115 | 119 | 122 | 129 | 108 | 111 | 118 |
| 85 | 99 | 106 | 109 | 112 | 116 | 119 | 122 | 91 | 108 | 112 | 118 |
| 89 | 100 | 106 | 110 | 113 | 116 | 119 | 122 | 95 | 126 | 113 |  |
| 90 | 102 | 107 | 111 | 113 | 118 | 119 | 124 | 103 | 127 | 115 |  |
| 90 | 103 | 108 | 111 | 113 | 118 | 119 | 126 | 104 | 120 | 121 |  |

1. Choose two out of the three methods to graph the data. Boxplot, histogram, stemplot. Clearly label all graphs. (1 point: Correctly drawn graphs with labeled scales.)
2. Describe the distribution. (1 point: Shape, center, and spread are all described.)

1. Using a method from the class, identify if any outliers present in the data. Justify your answer. (1 pt)
2. You see a score of 132. Would this be unusual? Justify your answer. (1 pt)

# Statistics and Data Analysis: Core Assignment 1 Practice problem #2

The following data is the number of pieces of candy received by and SRS of children on Halloween night.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 62 | 70 | 73 | 76 | 77 | 79 | 82 | 89 |
| 62 | 71 | 73 | 76 | 77 | 80 | 82 | 89 |
| 65 | 72 | 74 | 76 | 78 | 80 | 85 | 91 |
| 66 | 72 | 75 | 76 | 78 | 81 | 86 | 91 |
| 67 | 73 | 75 | 77 | 78 | 81 | 88 |  |

1. Choose two out of the three methods to graph the data. Boxplot, histogram, stemplot. Clearly label all graphs. (1 point: Correctly drawn graphs with labeled scales.)
2. Describe the distribution. (1 point: Shape, center, and spread are all described.)

1. Using a method from the class, identify if any outliers present in the data. Justify your answer. (1 pt)
2. A child received 130 pieces of candy. Would this be unusual? Justify your answer. (1 pt)